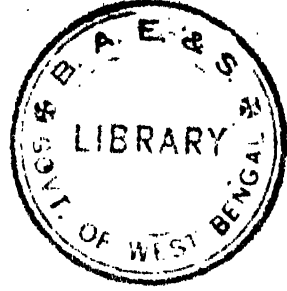




For Official use only.



TIMELY REPORTING
OF
AGRICULTURAL STATISTICS
IN
ANDHRA PRADESH

ANNUAL REPORT 1973-74



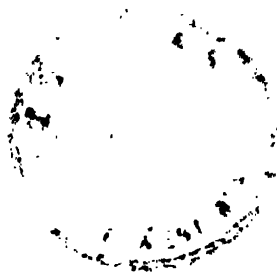
ISSUED BY
BUREAU OF ECONOMICS AND STATISTICS
GOVERNMENT OF ANDHRA PRADESH
HYDERABAD

TIMELY REPORTING OF AGRICULTURAL STATISTICS

IN

ANDHRA PRADESH

ANNUAL REPORT 1973-'74



Issued by:-
BUREAU OF ECONOMICS AND STATISTICS
GOVERNMENT OF ANDHRA PRADESH
HYDERABAD.

suri.

* CONTENTS *

Section	Page
1. Introduction ..	1
2. Objective of the Scheme ..	3
3. Scope and Coverage ..	4
4. Design ..	4
5. Due dates for submission of crop aereages	5
6. Field Operation ..	6
7. Training ..	7
8. Staff ..	7
9. Response ..	7
10. Supervision ..	8
11. Estimation Procedure ..	9
12. Results ..	10
13. Difficulties ..	16

APPENDIX
00000000

<u>Table No.2.1: State Estimates of area of selected crops and their percentage sampling error during Kharif season 1973-'74.</u>	17
<u>Table No.2.2: State Estimates of area of selected crops and their percentage sampling error during Rabi season 1973-'74.</u>	18
<u>Table No.2.3: Crop-wise estimated irrigated area and area as per Agricultural Census for principal crops during 1973-'74.</u>	19
<u>Table No.3.1: District-wise estimates of area and their percentage of sampling errors and percentage of increase or decrease of estimated area over Agricultural Census during Kharif Season 1973-'74</u>	20-28
<u>Table No.3.2: -do- Rabi Season 1973-'74.</u>	29-36
<u>FACIMILE OF TRAS CARDS & INSPECTION REPORTS</u>	
a) T.R.A.S. Cards for 1973-'74.	37-40
b) Inspection Report for ordinary & HYV(to be canvassed by TSAs and PAs)	41-44
c) Supervisory Officers' Inspection Report for ordinary and HYV (to be supervised by District Statistical Officers and their Senior Investigators)	45-48

--:000:--

LIBRARY	
833	
16 12 8	
NO.	2. A. P.

9511 Rep 27
A.P.



26.8.25

TIMELY REPORTING OF AGRICULTURAL STATISTICS REPORT DURING
1973-74.

INTRODUCTION:

In Andhra Pradesh, Agricultural Statistics are compiled by the Bureau of Economics and Statistics on the basis of the land Revenue Records maintained at the village level. There is complete field-to-field enumeration at the village level and the area sown under crops and also under different land utilisation are recorded against each survey number in the basic record i.e., Adangal in Andhra Region and the Pahani in the Telangana Region. There are two distinct Agricultural seasons in Andhra Pradesh i.e., Kharif and Rabi and the Agricultural Statistics are compiled for these two seasons separately. The area sown during the months of June to September is classified as Kharif and from October to March as Rabi. The lands sown or planted after March are shown in the next Kharif seasons account as they are invariably harvested in the next agricultural year. If, however, any such area sown after March are harvested before the end of the May such areas are added to the data collected during the Rabi/Tabi season. For the purpose of compilation of area statistics, the Bureau of Economics and Statistics conducts a regular Agricultural Census twice in the year i.e., during Kharif and Rabi seasons, with the assistance of the Revenue Inspectors, Taluk Statistical Assistants, Progress Assistants and other Extension staff at the Block level. The details of the various stages of Kharif/Abi and Rabi/Tabi Censuses are shown below:-

KHARIF AND ABI CENSUS

Details of operations	Period
1. Enumeration work	5th to 20th November.
2. Checking of the village Abstracts by the Supervisors	20th to 25th November.
3. Preparation of Circle Abstracts	25th to 30th November.
4. Compilation of Taluk Abstracts in the Taluk Office.	1st to 10th December.
5. Supply of Circle and Taluk Abstracts to the District Statistical Officer.	15th December.
6. Supply of District Abstract to the Bureau.	30th December.

RABI AND TABI CENSUS

Details of operations	Period
1. Enumeration work	5th to 20th April
2. Checking of the Village Abstracts by the Supervisors	20th to 25th April
3. Preparation of Circle Abstracts	25th to 30th April.
4. Compilation of Taluk Abstracts in the Taluk Office.	1st to 10th May.
5. Supply of Circle and Taluk Abstracts to the District Statistical Officer	15th May.
6. Supply of District Abstract to the Bureau.	30th May.

Since 1951-52, several steps have been taken up. All-India and State levels for the improvement of Agricultural Statistics especially with reference to their quality and timeliness. In spite of all these steps, the area estimates based on forecast reports and the actual enumeration are becoming available at State and All India levels only long after the crops are sown. Similarly, the estimates of production are available to Government long after the harvest of the crops is over. The States and the Government of India were finding it extremely difficult to take various policy decisions and adopt corrective measures in the absence of availability of area and production estimates in time. Apart from bringing improvement in the quality of Agricultural Statistics, there is also a need to fill up the various gaps which exist in the collection of Agricultural Statistics.

Considering the above factors, the Government of India sanctioned a centrally sponsored scheme under the name "Timely Reporting of Agricultural Statistics" to be implemented by States from 1971-72 with a view to obtain estimates of area under the principal crops immediately after the sowings of the crops are completed and the estimates of production immediately after the harvest of the crops is over.

THE MAIN OBJECTIVES OF THE SCHEME ARE:

1. To reduce time-lag in the availability of estimates of area and production.
2. To prepare calendar of Agricultural Operations for each crop for arriving at due dates for obtaining of information on crop acreages.

3. To work out season-wise estimates of area on the basis of acreage particulars obtained from a sample immediately after the completion of sowings.
4. To estimate separately irrigated and unirrigated area under a crop where irrigation is important.
5. To estimate separately the area under High yielding and Ordinary varieties and
6. To build up correction factor to the data reported by the village officers on the basis of results of spot verification carried out by Statistical Staff.

SCOPE AND COVERAGE: The scheme has been implemented in Andhra Pradesh from ^{Kharif} Rabi 1971-72 season. The scheme is implemented in all the 21 districts in the State. In the taluks where regular Revenue Agency exists the responsibility of furnishing of information rests with Revenue Agency. In the agency taluks where there is no Revenue Agency the particulars are being collected through Extension Staff working in Panchayat Samithis. The following important crops which account for about 80% of cropped area in the State are being covered under the survey.

KHARIF: Paddy, Bajra, Jowar, Ragi, Maize, Sugarcane, Groundnut, Cotton and Castor.

RABI: Paddy, Jowar, Bajra, Ragi, Maize, Groundnut Cotton and Tobacco.

DESIGN: A unistage stratified systematic sampling design has been adopted with taluk as strata. The villages from each stratum are selected circular systematically after arranging them in random order. A non over-lapping sample

of size of one fifth of total villages are selected every year so as to cover all the villages in the State in a period of five years.

DUE DATES FOR SUBMISSION OF INFORMATION AND CROP ACREAGES:

The due dates for submission of information on crop acreages by Karanam/Patwari have been fixed after taking into consideration the period of crop inspection by Patwari/Karanam in each season and calendar of sowings for each crop.

The Karanam/Patwari who is primarily responsible for land revenue collection is expected to maintain upto-date information on area cultivated after making field to field inspection. While in Andhra Region the crop inspection is done regularly every month, the Patwari in Telangana Region is expected to under take crop enumeration once in each season, i.e., in the second fortnight of September for kharif season and in the Second fortnight of March for Rabi season. But at the same time, the Patwaries are expected to ensure that no crop sown during the year is missed from recording.

The sowings of the most of the Kharif crops are normally completed by the end of August excepting in a few places where Paddy is transplanted in September. Similarly the sowings of Rabi crops are completed before the end of January excepting transplantaion of Rabi Paddy, which takes place up-to March in certain parts of the State. The Sugarcane crop which is normally planted in between January and March is shown in next year's Kharif accounts. Tobacco is grown only in Rabi season.

Keeping in view the above facts the following due dates have been prescribed for furnishing of crop acreages by village Revenue Agency to the State Headquarters.

Season/Card	C R O P	Due date for submission of cards to Bureau.
-------------	---------	---

KHARIF:

Card I	Rice	...	30th September.
Card II :	Jowar	0	
	Bajra	0	
	Maize	0	30th September.
	Ragi	0	
	Groundnut	0	
	Castor	0	
	Cotton.	0	
Card VI :	Sugarcane	...	30th September.

RABI:

Card III :	Jowar	...	30th November.
Card IV	Ragi	0	
	Maize	0	
	Cotton	0	31st January.
	Groundnut	0	
	Bajra	0	
	Tobacco	0	
Card V :	Rice	...	15th March.

SCHEDULE: The facimile of Timely Reporting of Agricultural Statistics return (card) is given at the end of this report. Provision has been made in the card for collection of previous year's area particulars along with the current year's particulars.

FIELD ORGANISATION ETC: While Village Revenue Agency is incharge of primary work, the Statistical Staff at District, Taluk and Block levels are expected to ensure timely completion of crop enumeration and transmission of Timely

Reporting of Agricultural Statistics returns by due date to the State Headquarters. The Statistical Agency also provides necessary technical guidance to the primary Revenue Agency in the method of recording besides rectification of mistakes at the field level itself.

TRAINING: The training programme has been organised in two stages. At the commencement of the Agricultural season, the Officers of the Bureau and National Sample Survey Organisation imparted training to the Statistical staff in the District. The district staff in turn conducted training class to the Patwaries/Karanams of the villages selected under Timely Reporting of Agricultural Statistics in the conduct of Survey.

STAFF:- In order to meet the above requirements, the District Statistical Agencies are strengthened by the appointment of one Senior Investigator, besides in certain districts with larger geographical jurisdiction (viz., Srikakulam, Visakhapatnam, Anantapur, Mahabubnagar and Adilabad) one additional District Statistical Officer is appointed. At the State Headquarters, one Deputy Director has been appointed for organising the work of this survey in the State. He is assisted by TWO Research Officers with necessary technical staff to attend to scrutiny, tabulation and analysis of data received from the field agency and Ministerial staff to attend to correspondence and accounts matters.

RESPONSE: The sample size adopted for the year 1973-74 and the percentage response during Kharif and Rabi are given below:

<u>YEAR</u>	<u>SAMPLE SIZE</u> <u>(No. of villages)</u>	<u>PERCENTAGE RESPONSE</u>
1973-74		
Kharif	5810	93
Rabi	5810	85

SUPERVISION: With a view to assess accuracy of area Statistics flowing from village Revenue Agency, sample check of area enumeration was carried out in a sub-sample of 20% of Timely Reporting of Agricultural Statistics sample (i.e, 1100 villages in each season). The sample check consisted of verification of crop acreages recorded by Patwaries in Two clusters of Three plots each from each selected village. The Progress Assistants and Taluk Statistical Assistants were entrusted with the responsibility of spot verification.

THE RESULTS OF SUPERVISION ARE PRESENTED BELOW:

Sl. No.	CROPS	Percentage difference between supervision and enumeration figures of area of crops.	
		KHARIF	RABI
1.	Paddy	- 0.34	- 2.15
2.	Jowar	+ 1.25	- 1.43
3.	Bajra	0	- 0.36
4.	Maize	- 1.12	- 0.31
5.	Ragi	- 0.51	- 0.31
6.	Groundnut	- 3.66	- 1.53
7.	Cotton	+ 0.01	0
8.	Castor	0	Not selected.
9.	Tobacco	--	+ 0.03
10.	Sugarcane	--	--

It may be seen from the above table that no significant differences are observed in the figures reported by Primary workers.

Besides sample check of area enumeration, Rationalised supervision on area under High yielding Varieties has been carried out in the set of villages with a view to arrive

PBR/286.

contd..9

at estimates of divergence between the area reported by the village Development Officers and the figures arrived at by field inspection by the supervisors.

The supervision has consisted of spot verification of High yielding variety acreages recorded by Village Development Officer in all plots grown by 5 sample cultivators. This item of work has been entrusted to Progress Assistants and Taluk Statistical Assistants.

THE SUMMARY RESULTS ARE PRESENTED BELOW:

Sl.No. CROP.	Percentage difference between supervision and recorded figures of area under high yielding varieties.	
	Kharif	Rabi
1. Paddy	- 6.99	- 3.32
2. Jowar	+ 2.89	- 4.06
3. Bajra	- 7.59	0
4. Maize	- 3.68	0

ESTIMATION PROCEDURE ADOPTED:

The formula for estimating the total area under a crop and its sampling error are given below:

1. K be the number of taluks in a district.
2. Y_{ij} be the area under a crop in the 'Jth' village of the 'ith' taluk in the current year.
3. X_{ij} be the area under a crop in 'Jth' village of the 'ith' taluk in the last year.
4. N_i be the total number of villages in the 'ith' taluk.
5. n_i be the total number of villages sampled in the 'ith' taluk.

6. \hat{R}_{ic} be the combined ratio estimate of the given crop in the taluk.

7. \hat{Y}_{ic} be the estimate of the area of crop in the district.

X_i is the total area under the crop in the district during the previous year based on Agricultural Census. Estimated area under the crop in the district is

given by:-

$$1. \quad \hat{Y}_{ic} = \sum_{i=1}^k R_{ic} X_i$$

$$\text{Where } R_{ic} = \frac{\sum_{j=1}^{n_i} Y_{ij}}{\sum_{j=1}^{n_i} X_{ij}} \quad (\text{Ratio Estimate})$$

$$2. \quad \hat{Y}_{ic} = K \sum_{j=1}^{n_i} Y_{ij} \quad \text{Where } Y_{ij} \text{ is the total of sample cluster and } K \text{ interval (un-biased estimate)}$$

Variance:-

The estimated variance of the estimated area of the crops is given by:-

$$\hat{V}(\hat{Y}_{ic}) = \sum_{i=1}^k \frac{N_i(N_i - n_i)}{n_i} (S_{iy}^2 + R_{ic}^2 S_{ix}^2 - 2 R_{ic} S_{ixy})$$

$$\text{Where } S_{iy}^2 = \frac{1}{n_i - 1} \sum_{j=1}^{n_i} (Y_{ij} - \bar{Y}_i)^2$$

$$S_{ix}^2 = \frac{1}{n_i - 1} \sum_{j=1}^{n_i} (X_{ij} - \bar{X}_i)^2$$

$$S_{ixy} = \frac{1}{n_i - 1} \sum_{j=1}^{n_i} (X_{ij} - \bar{X}_i)(Y_{ij} - \bar{Y}_i)$$

RESULT -

On the basis of crop acreages obtained from 20% villages for the crops covered under the survey ^{Two} ~~few~~ kinds of estimates viz., Ratio estimate and un biased estimate have been built up. But the sampling errors have been worked for ratio estimates only.

These estimates along with the data based on Agricultural Census have been summarised and presented below:

(Contd..11.

(Area in '00' Hectares.)												
C R O P	Kharif Estimates 1973-74		Agricultural census Kharif 1973-74. Col. 3/4.	% Vari- ation Col. 3/4.	Rabi Estimates 1973-74		Agricultural census Rabi 1973-74. Col. 7/8.	% Vari- ation Col. 7/8.	Kharif & Rabi Estimates 1973-74		Agricultural census 1973-74. Col. 11/12.	
	Un-biased Ratio	Ratio			Un-biased Ratio	Ratio			unbiased Ratio	Ratio		
1	2	3	4	5	6	7	8	9	10	11	12	
1. Paddy	24291	23713	24842	-6.2	7640	8126	8941	-9.1	31931	31839	33783	(-) 5.8
2. Jowar	13104	12676	14500	(-)12.6	13667	14315	12934	(+)10.7	26771	26991	27434	(-) 1.6
3. Bajra	5600	5400	5724	(-)5.7	124	113	101	(+)11.9	5724	5513	5825	(-) 5.4
4. Maize	2325	2312	2379	(-) 2.8	423	607	436	(+)39.2	2748	2919	2815	(+) 3.7
5. Ragi	1877	1684	1743	(-) 3.4	827	978	804	(+)21.6	2704	2662	2547	(+) 4.5
6. Groundnut	10646	10551	11510	(-)8.3	2173	2079	2364	(-)12.1	12819	12630	13874	(-) 9.0
7. Castor	3316	2865	3567	(-)19.7	Not collected		366	--	3316 b	2865 b	3933 @	(-) 27.2
8. Cotton	2527	2353	3230	(-)27.2	890	1102	674	(+) 63.5	3417	3455	3904	(-)11.5
9. Sugarcane	1500	1429	1436	(-) 0.5	--	--	--	--	1500	1429	1436	(-) 0.5
10. Tobacco	--	--	--	--	1835	2223	2365	(-) 6.0	1825	2223	2365	(-) 6.0

b = does not include Rabi area ; @ includes Rabi area.

It may be seen from the table that the estimates are lower than the census figures for the Kharif Season and vice versa in the Rabi season, except, in the case of Paddy and Groundnut. The estimates under these two crops are lower than the census in both the seasons.

Following are the reasons for over estimation of Rabi crops and under estimation of Kharif areas:

1. Non-inclusion of traditional Kharif sowings that take place beyond cut off dates and their inclusion in Rabi sowings in the data reported under the Survey in certain areas such as Nellore and Chittoor.

2. Non-inclusion of Kharif sowings that took place beyond cut off dates in 1973-74 because of favourable seasonal conditions in the second fortnight of September in some parts of the State and their subsequent inclusion in Rabi sowings.

The area estimates for the two seasons along with sampling errors and percentage differences were compared to actuals and are presented in Tables 2.1 and 2.2 respectively. Details of the estimates of irrigated area are given in Table 2.3.

It can be seen from the table 2.1 that the sampling errors of all important Kharif crops are less than 2% and in the case of other crops less than 5%, similarly. It can be observed from table 2.2 that the percentage

sampling errors have exceeded 5 percent in the case of Cotton and Bajra only. The high percentage sampling errors of the estimated area for these two crops may be attributed to the very small areas under these crops.

The district-wise estimates of area along with their percentage sampling errors, actual area based on Agricultural Census and the percentage difference for the two seasons for the crops covered under the survey are presented in table 3.1, 3.2.

These results have been summarised in the following tables.

contd..14.

DISTRICT-LEVEL DATA ON AGRI-CULTURAL ERRORS FOR THE SELECTED CROPS UNDER FINELY REPORTING OF AGRICULTURAL STATISTICS SURVEY IN ANDHRA PRADESH DURING 1973-84.

C R O P	No. of Districts		PER CENT AGE		S A M P L I N G		E R R O R		R A T I O		B I	
	Khari	Pabi	Below 5	5 to 10	10 to 15	15 & above	Below 5	5 to 10	10-15	15 and above.		
1	2	3	4	5	6	7	8	9	10	11		
Paddy	21	21	13	7	11	1	4	5	6	6		
Sowar	21	21	8	4	1	8	10	6	2	3		
Bajra	20	8	6	6	2	6	7	2	1	4		
Maize	17	14	4	2	3	8	1	2	3	8		
Ragi	19	14	1	4	4	10	3	6	2	3		
Groundnut	21	18	5	14	11	2	2	4	4	8		
Caster	20	--	4	2	1	13	--	--	--	--		
Cotton	17	13	2	2	5	8	--	2	2	9		
Sugarcane	17	--	5	6	1	5	--	--	--	--		
Tobacco	--	19	--	--	--	--	2	5	--	5		
TOTAL	175	128	48	47	17	61	23	32	27	46		

DISTRICT-WISE PERCENTAGE VARIATIONS OF ESTIMATED AREA COVERED BY THE AGRICULTURAL CENSUS FOR THE
SELECTED CROPS UNDER FIVE YEARLY REPORTING OF AGRICULTURAL STATISTICS SURVEY IN
ANDHRA PRADESH DURING 1971-74.

		PERCENTAGE OF VARIATION											
		KHARIF											
		R A B I											
C R O P	No. of Districts	Below 5	5 to 10	10 to 15	15 and above	Below 5	5 to 10	10 to 15	15 and above	Below 5	5 to 10	10 to 15	15 and above
		1	2	3	4	5	6	7	8	9	10	11	
1. Paddy	21	21	7	6	1	7	4	1	4	12			
2. Jowar	21	21	3	5	3	10	4	4	5	8			
3. Bajra	18	10	5	5	2	6	--	2	--	8			
4. Ragi	14	11	1	3	4	6	1	2	1	7			
5. Maize	16	11	4	2	3	7	--	--	--	11			
6. Cotton	17	14	--	1	--	12	1	2	--	11			
7. Groundnut	18	18	6	6	3	6	4	1	1	12			
8. Tobacco	--	18	--	--	--	--	4	1	2	11			
9. Sugarcane	15	--	4	2	2	7	--	--	--	--			
TOTAL	139	14	30	30	18	61	18	13	13	80			

KHARIF:

It may be seen from the Statement that the percentage sampling error is less than 5 in 48 cases, ranging between 5 and 10 in 47 cases and it has exceeded 15 in 61 cases. As regards the percentage difference between the estimates and actuals, it is less than 5 in 30 cases ranging between 5 and 10 in 30 cases and has exceeded 15 in 61 cases.

RABI:

The percentage sampling error is less than 5 in 23 cases, ranging between 5 and 10 in 32 cases and it has exceeded 15 in 46 cases. As regards the percentage difference between the estimates and actuals, it is less than 5 in 13 cases, ranging between 5 and 10 in 13 cases and it has exceeded 15 in 80 cases.

DIFFICULTIES ENCOUNTERED:

There was a short fall in the receipt of cards during the p 1973-74 due to the seizure of land records in connection with the implementation of Land Ceiling Act in the State.

TABLE NO. 2.1

STATE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR PERCENT-
AGE SAMPLING EFFOR UNDER TIMELY REPORTING OF AGRICULTURAL
STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND
PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

.....

(AREA IN '00' HECTARES.)

C R O P	Ratio	Area as per	Percentage	Percentage
	estimated	Agricultural	variation	of sampling
	area.	Census, Kharif	Col. 2/3.	error.
		1973-74.		
1	2	3	4	5
1. Paddy	23,713	24,842	(-) 6.2	1.52
2. Jowar	12,676	14,500	(-) 12.6	1.72
3. Bajra	5,400	5,724	(-) 5.7	1.71
4. Maize	2,312	2,379	(-) 2.8	1.89
5. Ragi	1,684	1,743	(-) 3.4	3.22
6. Groundnut	10,551	11,510	(-) 8.3	1.33
7. Castor	2,865	3,567	(-) 19.7	2.93
8. Cotton	2,353	3,230	(-) 27.2	4.49
9. Sugarcane	1,429	1,436	(-) 0.5	2.61

TABLE NO. 2.

STATE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR PERCENTAGE SAMPLING ERROR UNDER TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

(AREA IN '00' HECTARES)

C R O P	Ratio Estimated area.	Area as per Agricultural Census Rabi 1973-74.	Percentage variation Col. 2/3.	Percentage of sampling Error.
1	2	3	4	5
1. Paddy	,8,126	8,941	(-) 9.1	2.43
2. Jowar	14,313	12,934	(+) 10.7	1.37
3. Bajra	113	101	(+) 11.9	10.91
4. Maize	607	436	(+) 39.2	14.66
5. Ragi	978	804	(+) 21.6	2.33
6. Groundnut	2,079	2,564	(-) 12.1	4.39
7. Cotton	1,102	674	(+) 53.5	8.88
8. Tobacco	1,223	2,555	(-) 6.0	3.82

PRR/-

TABLE NO. 23

CROP-WISE ESTIMATED IRRIGATED AREA AND AGRICULTURAL CENSUS AREA FOR PRINCIPAL CROPS UNDER TIMELY REPORTING OF AGRICULTURAL STATISTICS SURVEY IN ANDHRA PRADESH DURING 1973-74.

(AREA IN '00' HECTARES)

C R O P	T.R.A.S. ESTIMATE 1973-74			AGRICULTURAL CENSUS 1973-74			PERCENTAGE VARIATION OF T.R.A.S. ESTIMATE OVER AGRICULTURAL CENSUS		
	Khari	Rabi	Khari	Khari	Rabi	Khari	Khari	Rabi	Net
1. Paddy	22,176	8,049	23,181	8,865	(-) 4.3	(-) 8.6			
2. Jowar	131	47	141	71	(-) 7.1	(-) 39.5			
3. Bajra	698	61	641	66	(+) 2.8	(-) 6.2			
4. Maize	170	580	99	431	(+) 71.7	(+) 34.6			
5. Ragi	391	771	396	641	(-) 1.3	(-) 20.3			
6. Groundnut	194	1,600	198	2,107	(-) 7.6	(-) 24.1			
7. Castor	1	--	--	No break up	--	--			
8. Cotton	66	93	140	86	(-) 52.9	(+) 8.1			
9. Tobacco	--	264	--	314	--	(-) 15.9			
10. Sugarcane	1,729 a	--	1,436 a	--	(-) 0.5	--			

a = area harvested only.

PBR/-

TABLE NO. 3

DISTRICT-WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

CROP: PADDY

(AREA IN '000 HECTARES)

Sl. No.	DISTRICT	Ratio estimate as per T.R.A.S. Kharif 1973-74.	Area as per Agricultural Census Kharif 1973-74.	Percentage variation of estimate over actuals.	Percentage sampling error.
1.	Srikakulam	2,558	2,581	(-) 0.89	2.47
2.	Visakhapatnam	1,239	866	(+)43.07	3.17
3.	East Godavari	2,311	2,359	(-) 2.04	1.90
4.	West Godavari	2,446	2,674	(-) 8.53	4.57
5.	Krishna	2,983	2,913	(+)2.22	1.68
6.	Guntur	2,456	2,650	(-) 7.43	1.42
7.	Ongole	466	616	(-)24.45	8.43
8.	Nellore	600	781	(-)23.35	16.09
9.	Kurnool	751	692	(+) 8.52	1.53
10.	Anantapur	409	588	(-)30.45	8.54
11.	Cuddapah	432	513	(-)15.79	7.30
12.	Chittoor	612	629	(-) 2.71	6.78
<hr/>					
	Andhra Region	17,267	17,867	(-) 3.36	2.10
<hr/>					
13.	Hyderabad	220	218	(+) 0.91	4.41
14.	Nizamabad	782	860	(-) 9.07	6.70
15.	Medak	512	499	(+) 2.60	5.50
16.	Mahabubnagar	664	735	(-) 9.66	4.32
17.	Nalgonda	1,284	1,360	(-) 5.59	4.79
18.	Warangal	814	1,007	(-)19.17	5.86
19.	Khammam	851	885	(-) 3.35	4.17
20.	Kharimnagar	797	891	(-)10.55	2.95
21.	Adilabad	522	518	(+) 0.77	4.44
<hr/>					
	TELANGANA REGION	6,446	6,973	(-) 7.56	1.89
<hr/>					
	ANDHRA PRADESH	23,713	24,840	(-) 4.55	1.52

contd.21

--21--
TABLE NO. 3.1

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING Kharif 1973-74.

CROP: JOWAR

(AREA IN HECTARES)

Sl. No.	District	Ratio Estimate as per T.R.A.S. Kharif 1973-74.	Area as per Agricultural Census Kharif 1973-74.	Percentage variation of estimated area over actual.	Percentage sampling error.
1.	Srikakulam	64	33	(+) 93.94	3.51
2.	Visakhapatnam	69	55	(+) 25.46	18.25
3.	East Godavari	49	58	(-) 15.52	11.42
4.	West Godavari	40	46	(-) 13.05	16.84
5.	Krishna	5	6	(-) 16.67	122.17
6.	Guntur	140	330	(-) 57.58	19.82
7.	Ongole	607	859	(-) 29.34	19.54
8.	Nellore	14	12	(+) 16.66	26.01
9.	Kurnool	1,000	932	(+) 7.29	4.71
10.	Anantapur	948	1,088	(-) 2.87	6.50
11.	Cuddapah	624	915	(-) 30.72	15.16
12.	Chittoor	105	110	(-) 4.55	8.45
Andhra Region		3,675	4,444	(-) 17.31	4.75
13.	Hyderabad	791	1,126	(-) 29.76	6.00
14.	Nizamabad	376	398	(-) 5.53	5.92
15.	Medak	1,132	1,365	(-) 17.07	4.84
16.	Mahabubnagar	3,026	3,249	(-) 6.87	2.86
17.	Nalgonda	964	1,019	(-) 5.40	3.04
18.	Warangal	753	762	(-) 1.19	3.29
19.	Khammam	116	125	(-) 7.20	15.16
20.	Karimnagar	778	791	(-) 1.65	4.98
21.	Adilabad	065	1,221	(-) 12.78	2.60
Telangana Region		9,001	10,056	(-) 10.50	1.46
Andhra Region		12,676	14,500	(-) 12.58	1.72

833/10-11-81
16-12-81

Working of Ag. Statistics
Station

TABLE NO. 3.1

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

CROP: BAJRA

(AREA IN '00' HECTARES)

Sl. No.	DISTRICTS	Ratio estimate as per T.R.A.S Kharif 1973-74.	Area as per Agricultural Census Kharif 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1.	Srikakulam	115	105	(+) 9.52	5.16
2.	Visakhapatnam	518	516	(+) 0.38	4.48
3.	East Godavari	125	149	(-) 16.11	15.52
4.	West Godavari	7	10	(-) 30.00	27.02
5.	Krishna	43	41	(+) 4.87	19.26
6.	Guntur	190	321	(-) 40.81	10.68
7.	Ongole	491	515	(-) 4.67	7.00
8.	Nellore	232	211	(*) 9.95	7.24
9.	Kurnool	239	253	(-) 5.54	3.67
10.	Anantapur	492	636	(-) 22.65	4.27
11.	Cuddapah	250	255	(-) 1.97	12.12
12.	Chittoor	234	274	(-) 14.60	5.54

	Andhra Region	2,936	3,286	(-) 10.66	2.28

13.	Hyderabad	89	116	(-) 23.28	9.62
14.	Nizamabad	--	7	--	--
15.	Medak	76	57	(+) 33.33	4.66
16.	Mahabubnagar	670	594	(+) 12.79	4.46
17.	Nalgonda	1,353	1,371	(-) 1.32	3.54
18.	Warangal	197	215	(-) 8.38	9.29
19.	Khammam	76	82	(-) 7.32	27.07
20.	Karimnagar	--	--	--	--
21.	Adilabad	2	2	--	20.93

	Telangana Region	2,464	2,444	(+) 0.81	2.57

	Andhra Pradesh	5,400	5,730	(-) 5.76	1.71

TABLE NO. 3.1

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

CROP: MAIZE

(AREA IN '00' HECTARES)

Sl. No.	District	Ratio estimate as per T.R.A.S Kharif 1973-74.	Area as per Agricultural census, kharif 73-74.	Percentage variation of estimate over actuals.	Percentage sampling error.
1.	Srikakulam	1	2	(-) 50.00	14.09
2.	Visakhapatnam	39	19	(+)105.26	0.32
3.	East Godavari	12	13	(-) 7.69	14.45
4.	West Godavari	6	7	(-) 14.29	19.87
5.	Krishna	12	17	(-) 29.41	16.21
6.	Guntur	6	12	(-) 50.00	28.86
7.	Ongole	--	--	--	--
8.	Nellore	--	1	--	--
9.	Kurnool	--	1	--	--
10.	Anantapur	4	6	(-) 33.34	14.46
11.	Chidambaram	--	--	--	--
12.	Chittoor	2	1	(+)100.00	33.16
<hr/>					
	Andhra Region	83	79	(+) 5.06	4.56
<hr/>					
13.	Hyderabad	63	74	(-) 14.27	15.27
14.	Nizamabad	520	525	(-) 0.96	5.00
15.	Medak	452	443	(+) 2.03	3.56
16.	Mahabubnagar	1	1	--	--
17.	Nalgonda	7	12	(-) 41.67	31.89
18.	Warangal	284	309	(-) 8.10	6.38
19.	Khammam	78	70	(+) 11.42	15.61
20.	Karimnagar	616	646	(-) 4.65	2.98
21.	Adilabad	209	219	(-) 4.57	2.66
<hr/>					
	Telangana Region	2,229	2,299	(-) 3.05	1.95
<hr/>					
	Andhra Pradesh	2,312	2,378	(-) 2.78	1.89

PBR/-

TABLE NO. 3.1

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

<u>CROP: RAGI</u>		(Area in '00' Hectares)			
Sl. No.	District.	Ratio estimate as per T.R.A.S Kharif 1973-74.	Area as per Agr- icultural Census Kharif 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1.	Srikakulam	286	304	(-) 5.92	12.24
2.	Visakhapatnam	252	191	(+) 31.94	5.10
3.	East. Godavari	34	42	(-) 19.05	52.87
4.	West Godavari	8	14	(-) 42.86	23.96
5.	Krishna	3	6	(-) 50.00	39.18
6.	Guntur	1	1	--	33.16
7.	Ongole	10	9	(+) 11.11	38.55
8.	Nellore	22	19	(+) 15.79	10.14
9.	Kurnool	3	3	--	21.59
10.	Anantapur	241	279	(-) 13.62	6.48
11.	Cuddapah	29	34	(-) 14.71	28.44
12.	Chittoor	312	338	(-) 7.69	4.06
<hr/>					
Andhra Region		1,201	2,240	(-) 3.15	3.67
<hr/>					
13.	Hyderabad	91	85	(+) 7.06	8.97
14.	Nizamabad	25	38	(-) 34.21	8.42
15.	Medak	89	92	(-) 3.26	10.15
16.	Mahabubnagar	275	308	(-) 10.71	10.55
17.	Nalgonda	--	1	--	--
18.	Warangal	--	2	--	47.92
19.	Khammam	2	2	--	16.40
20.	Karimnagar	1	--	--	53.57
21.	Adilabad	--	--	--	--
<hr/>					
Telangana Region		483	528	(-) 8.52	6.53
<hr/>					
Andhra Pradesh		1,684	1,768	(-) 4.75	3.22

TABLE NO. 1

DISTRICT WISE ESTIMATE OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

CROP: GROUNDNUT

(AREA IN '00' HECTARES)

Sl.No. Districts.	Ratio estimate as per T.R.A.S. Kharif 1973-74.	Area as per Agricultural census Kharif 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1. Srikakulam	658	688	(-) 4.36	3.88
2. Visakhapatnam	600	554	(+) 8.30	5.44
3. East Godavari	67	75	(-) 10.67	7.89
4. West Godavari	32	38	(-) 15.79	27.09
5. Krishna	222	173	(+) 28.32	7.75
6. Guntur	92	173	(-) 46.82	20.00
7. Ongole	171	157	(+) 8.92	5.18
8. Nellore	58	64	(-) 9.37	9.73
9. Kurnool	1,525	1,513	(+) 0.79	2.64
10. Anantapur	2,120	2,569	(-) 17.17	7.73
11. Cuddapah	779	1,105	(-) 29.50	9.68
12. Chittoor	2,005	2,089	(-) 4.02	1.59
Andhra Region	8,339	9,198	(-) 9.34	1.55
13. Hyderabad	47	51	(-) 7.84	6.89
14. Nizamabad	97	93	(+) 4.30	6.79
15. Medak	47	42	(+) 11.90	8.92
16. Mahabubnagar	661	728	(-) 9.20	4.81
17. Nalgonda	343	372	(-) 7.80	7.90
18. Warangal	301	297	(+) 1.34	6.35
19. Khammam	277	247	(+) 12.14	5.35
20. Karimnagar	311	298	(+) 4.36	6.97
21. Adilabad	127	185	(-) 31.35	5.75
Telangana Region	2,212	2,313	(-) 4.37	2.44
Andhra Pradesh	10,551	11,511	(-) 8.34	1.33

TABLE NO. 3.1

DISTRICT-WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND THE PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

CROP: CASTOR

(AREA IN '00' HECTARES)

Sl.No. District	Ratio estimate as per T.R.A.S Kharif 1973-74.	Area as per Agricultural Census Kharif 1973-74.	Percentage variation of Estima- ted area over actuals.	Perce- tage sampl- ing error.
1. Srikakulam	--	--	--	--
2. Visakhapatnam	4	--	--	4.94
3. East Godavari	--	--	--	28.57
4. West Godavari	2	2	--	31.47
5. Krishna	7	8	(-) 2.50	32.47
6. Guntur	87	124	(-) 29.84	22.83
7. Ongole	161	229	(-) 29.69	8.13
8. Nellore	4	6	(-) 33.33	33.48
9. Kurnool	19	19	--	15.61
10. Anantapur	74	90	(-) 17.78	27.52
11. Eddapah	6	8	(-) 25.00	68.80
12. Chittoor	3	4	(-) 25.00	15.77
Andhra Region	367	490	(-) 25.10	8.69
13. Hyderabad	168	227	(-) 25.99	10.86
14. Nizamabad	8	7	(+) 14.29	43.64
15. Medak	90	93	(-) 3.23	1.04
16. Mahabubnagar	796	936	(-) 14.96	4.85
17. Nalgonda	1,232	1,578	(-) 21.93	4.90
18. Warangal	84	155	(-) 45.81	23.34
19. Khammam	2	4	(-) 50.00	85.61
20. Karimnagar	101	187	(-) 45.99	9.57
21. Adilabad	17	13	(+) 30.77	19.39
TELANGANAREGION	2,498	3,200	(-) 21.94	3.11
Andhra Pradesh	2,865	3,690	(-) 22.36	2.93

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74

...

CROP: COTTON

(Area in '00' Hectares)

Sl. District No.	Ratio estimate as per T.R.A.S. Khairif 1973-74.	Area as per Agricultural Census, Khairif 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1. Srikakulam	--	--	--	--
2. Visakhapatnam	--	--	--	--
3. East Godavari	5	6	(-) 16.67	41.28
4. West Godavari	--	1	--	65.96
5. Krishna	2	6	(-) 66.67	106.93
6. Guntur	249	495	(-) 49.70	27.66
7. Ongole	181	350	(-) 48.29	9.16
8. Nellore	1	2	(-) 50.00	66.16
9. Kurnool	819	1,079	(-) 24.10	10.13
10. Anantapur	117	199	(-) 41.21	11.85
11. Cuddapah	85	107	(-) 20.56	11.51
12. Chittoor	--	1	--	37.27
Andhra Region	1,459	2,246	(-) 35.04	7.10
13. Hyderabad	1	2	(-) 50.00	2.08
14. Nizamabad	10	15	(-) 33.33	21.37
15. Medak	2	2	--	10.24
16. Mahabubnagar	2	2	--	10.37
17. Nalgonda	--	--	--	--
18. Warangal	1	2	(-) 50.00	83.84
19. Khanmam	--	1	--	--
20. Karimnagar	5	3	(+) 66.67	5.55
21. Adilabad	873	957	(-) 8.78	2.36
Telangana Region	894	984	(-) 9.15	2.31
Andhra Pradesh	2,353	3,230	(-) 27.15	4.49

TABLE NO. 3.1

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING KHARIF 1973-74.

.....

CROP: SUGARCANE:

(area in '00' Hectares)

Sl.No. District	Ratio estimate as per T.R.A.S Kharif 1973-74.	Area as per Agri-cultural census Kharif 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1. Srikakulam	81	73	(+) 10.96	5.77
2. Visakhapatnam	227	230	(-) 1.30	3.01
3. East Godavari	207	234	(-) 11.54	8.20
4. West Godavari	245	238	(+) 2.94	3.59
5. Krishna	120	125	(-) 4.00	7.62
6. Guntur	50	31	(+) 61.29	2.94
7. Ongole	2	-	--	18.16
8. Nellore	1	1	--	11.14
9. Kurnool	4	1	(+) 300.00	17.53
10. Amantapur	50	53	(-) 5.66	5.97
11. Cuddapah	21	2	(+) 950.00	8.62
12. Chittoor	207	219	(-) 5.48	3.31
Andhra Region	1,125	1,207	(+) 0.66	3.03
13. Hyderabad	9	4	(+) 125.00	17.33
14. Nizamabad	140	99	(+) 41.41	19.60
15. Medak	59	60	(-) 1.67	7.25
16. Mehabubnagar	--	1	--	--
17. Nalgonda	--	--	--	--
18. Warangal	--	--	--	--
19. Khammam	--	--	--	--
20. Karimnagar	1	2	(-) 50.00	44.37
21. Adilabad	5	6	(-) 16.67	4.72
TELANGANA REGION	214	172	(+) 24.42	13.04
Andhra Pradesh	1,429	1,379	(+) 3.62	2.61

TABLE NO. 2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

CROP: TOBACCO

(Area in '00 Hectares)

Sl. No.	District	Ratio estimate as per T.R.A.S Rabi 1973-74.	Area as per Agricultural census Rabi 1973-74.	Percentage variation of estimated area over actuals	Percentage sampling error.
1.	Srikakulam	17	13	(+) 30.76	5.40
2.	Visakhapatnam	21	16	(+) 31.25	10.05
3.	East Godavari	90	115	(-) 21.74	12.83
4.	West Godavari	183	175	(+) 4.57	5.71
5.	Krishna	160	173	(-) 7.52	4.02
6.	Guntur	252	314	(-) 19.75	10.97
7.	Ongole	874	864	(+) 1.15	7.50
8.	Nellore	75	76	(-) 1.32	8.39
9.	Kurnool	192	277	(-) 30.69	14.23
10.	Anantapur	1	4	(-) 75.00	42.01
11.	Cuddapah	2	2	--	52.20
12.	Chittoor	--	--	--	--
ANDHRA REGION		1,868	2,029	(-) 7.94	4.19
13.	Hyderabad	3	1	(+) 100.00	--
14.	Nizamabad	2	5	(-) 60.00	14.42
15.	Medak	25	18	(+) 38.88	9.23
16.	Mehabubnagar	94	76	(+) 23.68	31.52
17.	Nalgonda	37	38	(-) 2.04	13.92
18.	Warangal	24	28	(-) 14.29	26.69
19.	Khammam	96	108	(-) 11.12	4.94
20.	Karimnagar	72	60	(+) 20.00	13.79
21.	Adilabad	2	2	--	16.69
TELANGANA REGION		355	336	(+) 5.65	9.35
ANDHRA PRADESH		2,223	2,365	(-) 6.01	3.82

TABLE NO. 3.2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

...

CROP: MAIZE

(Area '00' Hectares)

SL.NO. DISTRICT	Ratio estimate as per T.R.A.S Rabi 1973-74.	Area as per Agri-cultural census Rabi 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1. Srikakulam	2	--	--	--
2. Visakhapatnam	22	--	--	10.15
3. East Godavari	1	3	(-) 66.67	--
4. West Godavari	8	5	(+) 60.00	21.96
5. Krishna	2	3	(-) 33.34	50.10
6. Guntur	1	2	(-) 50.00	26.10
7. Ongole	--	1	--	--
8. Nellore	--	--	--	--
9. Kurnool	1	4	--	78.26
10. Anantapur	2	4	(-) 50.00	53.42
11. Cuddapah	--	--	--	--
12. Chittoor	--	1	--	48.79
Andhra Region	39	19	(+) 105.26	18.94
13. Hyderabad	1	1	--	44.17
14. Nizamabad	21	15	(+) 40.00	8.99
15. Medak	13	8	(+) 62.50	12.59
16. Mehabubnagar	--	--	--	--
17. Nalgonda	6	--	--	--
18. Warangal	205	156	(+) 31.41	9.17
19. Khammam	13	6	(+) 116.66	11.43
20. Karimnagar	280	210	(+) 33.33	3.35
21. Adilabad	29	21	(+) 38.09	15.25
Telangana Region	568	417	(+) 36.21	3.85
ANDHRA PRADESH	607	436	(+) 39.22	3.66

TABLE NO. 3.2

PERCENTAGE
TAGE

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND/ ~~PERCENTAGE~~ INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, ~~AND~~ THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

...

CROP: BAJRA:

(area in '00' Hectares)

Sl.No. District	Ratio estimate as per T.R.A.S Rabi 1973-74.	Area as per Agri- cultural census Rabi 1973-74.	Percentage Increase- variation of estima- ted area over actual.	Percentage sampling error.
1. Srikakulam	--	--	--	--
2. Visakhapatnam	-	--	--	--
3. East Godavari	--	1	--	--
4. West Godavari	--	--	--	--
5. Krishna	1	--	--	--
6. Guntur	15	13	(+) 15.33	1.10
7. Ongole	29	25	(+) 16.00	6.70
8. Nellore	15	14	(+) 7.14	8.10
9. Kurnool	10	6	(-) 66.66	42.36
10. Anantapur	14	5	(+) 180.00	47.82
11. Cuddapah	2	14	(-) 5.72	10.78
12. Chittoor	12	8	(+) 50.00	34.50
Andhra Region	98	86	(+) 13.25	11.14
13. Hyderabad	--	1	--	--
14. Nizamabad	--	--	--	--
15. Medak	--	--	--	--
16. Mehabubnagar	8	3	(+) 166.66	--
17. Nalgonda	4	6	(-) 33.34	--
18. Warangal	3	4	(-) 25.00	50.97
19. Khammam	--	1	--	--
20. Karimnagar	--	--	--	--
21. Adilabad	--	--	--	--
TELANGANA REGION	15	15	--	50.97
Andhra Pradesh	113	101	(-) 11.88	10.91

TABLE NO. 3.2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

CROP: JOWAR

(Area in '00' Hectares)

Sl. No.	Districts	Ratio estimate as per T.R.A.S Rabi 1973- 74.	Area as per Agri- census Rabi 1973-74.	Percentage variation of estima- ted area over actuals.	Percentage sampling error.
1.	Srikakulam	73	45	(+) 62.22	8.68
2.	Visakhapatnam	143	98	(+) 45.92	8.75
3.	East Godavari	67	61	(*) 9.84	12.20
4.	West Godavari	57	52	(+) 9.62	16.80
5.	Krishna	767	751	(+) 2.13	4.40
6.	Guntur	271	283	(-) 3.21	6.80
7.	Ongole	750	528	(+) 35.41	3.10
8.	Nellore	606	554	(+) 9.39	3.00
9.	Kurnool	2,270	2,303	(-) 1.43	4.19
10.	Anantapur	542	378	(+) 43.39	10.26
11.	Cuddapah	252	103	(+) 144.66	30.87
12.	Chittoor	4	6	(-) 33.33	83.00
					2.50
Andhra Region		5,769	5,159	(+) 11.82	
13.	Hyderabad	391	346	(+) 13.00	6.55
14.	Nizamabad	388	346	(+) 12.13	8.36
15.	Medak	785	660	(+) 18.93	4.95
16.	Mahabubnagar	904	765	(+) 18.16	8.14
17.	Nalgonda	1,021	924	(+) 10.49	4.34
18.	Warangal	1,278	1,121	(+) 14.00	3.64
19.	Khammam	2,047	1,934	(+) 5.84	3.21
20.	Karimnagar	436	500	(-) 2.80	3.35
21.	Adilabad	1,296	1,178	(+) 10.01	7.70
					1.56
Telangan Region		8,547	7,774	(+) 9.94	
					1.37
Andhra Pradesh		14,315	12,933	(+) 10.68	

TABLE NO. 2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA UNDER TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

CROP: PADDY

(area in '00' Hectares)

Sl. No.	District	Ratio estimate as per T.R.A.S Rabi 1973-74.	Area as per Agri-cultural census Rabi 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error
1.	Srikakulam	72	53	(+ 35.84	23.70
2.	Visakhapatnam	145	131	(+) 10.68	9.17
3.	East Godavari	782	791	(-) 1.14	14.00
4.	West Godavari	1,010	1,000	(+) 1.00	10.20
5.	Krishna	309	310	(-) 0.33	10.50
6.	Guntur	104	158	(-) 34.18	13.00
7.	Ongole	309	133	(+) 64.35	8.40
8.	Nellore	1,258	1,127	(+) 11.62	4.00
9.	Kurnool	187	203	(-) 7.88	20.62
10.	Anantapur	458	439	(+) 4.33	4.43
11.	Cuddapah	257	205	(+) 25.61	10.94
12.	Chittoor	811	697	(+) 16.79	4.25
Andhra Region		5,683	5,297	(+) 7.29	3.11
13.	Hyderabad	158	197	(-) 19.80	15.25
14.	Nizamabad	273	311	(-) 10.61	16.99
15.	Medak	267	409	(-) 34.72	8.66
16.	Mahabubnagar	273	329	(-) 17.02	7.32
17.	Nalgonda	837	1,197	(-) 30.38	4.87
18.	Warangal	175	55	(-) 50.84	13.11
19.	Khammar	39	35	(+) 12.43	31.86
20.	Karimnagar	391	680	(-) 42.50	7.95
21.	Adilabad	26	130	(-) 80.00	16.30
Telangana Region		2,443	3,644	(-) 32.96	3.51
Andhra Pradesh		8,126	8,941	(-) 9.12	2.43

TABLE NO. 3.2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENT OF INCREASE OR DECREASE OF ESTIMATED AREA OVER THE AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH, DURING RABI 1973-74.

...

CROP: GROUNDNUT		(Area in '00' Hectares)		
Sl.No.	District	Ratio estimate as per T.R.A.S Rabi 1973-74.	Area as per Agricultu census Rabi 1973-74.	Percentage variation of estima- ted area over actuals.
1.	Srikakulam	3	9	(-) 66.67
2.	Visakhapatnam	18	2	(+) 800.00
3.	East Godavari	32	33	(-) 3.04
4.	West Godavari	32	43	(-) 33.34
5.	Krishna	119	124	(-) 4.04
6.	Guntur	219	226	(-) 3.10
7.	Ongole	43	63	(-) 31.75
8.	Nellore	86	149	(-) 42.29
9.	Kurnool	340	393	(-) 13.40
10.	Anantapur	219	209	(+) 4.78
11.	Cuddapah	66	71	(-) 7.05
12.	Chittoor	363	272	(+) 33.45
Andhra Region		1,540	1,602	(-) 3.88
13.	Hyderabad	16	16	--
14.	Nizamabad	9	6	(+) 50.00
15.	Medak	--	3	--
16.	Mahabubnagar	184	253	(-) 27.28
17.	Nalgonda	121	156	(-) 22.44
18.	Warangal	157	197	(-) 20.31
19.	Khammam	28	55	(-) 49.10
20.	Karimnagar	22	76	(-) 71.06
21.	Adilabad	--	--	--
Telangana Region		539	762	(-) 29.27
Andhra Pradesh		2,079	2,364	(-) 12.06

TABLE NO. 1.2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR ESTIMATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

CROP: COTTON

AREA IN '00' HECTARES

Sl. No.	DISTRICTS	Ratio estimate as per TRAS Rabi 1973-74.	Area as per agricultural census Rabi 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1.	Srikakulam	--	--	--	--
2.	Visakhapatnam	1	--	--	--
3.	East Godavari	10	5	(+) 100.00	11.00
4.	West Godavari	1	2	(-) 50.00	--
5.	Krishna	23	10	(+) 21.05	9.30
6.	Guntur	206	53	(+) 283.33	20.40
7.	Ongole	169	29	(+) 22.75	14.40
8.	Nellore	1	23	(-) 5.66	27.10
9.	Kurnool	468	329	(+) 42.24	6.67
10.	Anantapur	103	68	(-) 51.47	18.31
11.	Chadapah	3	0	(-) 2.50	11.00
12.	Chittoor	4-	130	--	--
Andhra Pradesh		985	666	(+) 41.00	9.31
13.	Hyderabad	--	--	--	14.29
14.	Nizamabad	5	9	(-) 44.45	--
15.	Medak	---	--	--	--
16.	Mahabubnagar	86	108	(-) 20.38	29.47
17.	Nalgonda	2	1	(+) 100.00	--
18.	Warangal	10	11	(-) 9.10	24.54
19.	Khammam	1	1	--	43.21
20.	Karimnagar	13	5	(+) 160.00	50.50
21.	Adilabad	---	--	--	--
Telangana Region		117	135	(-) 13.34	23.37
Andhra Pradesh		1102	801	(+) 37.57	8.88

TABLE NO. 3.2

DISTRICT WISE ESTIMATES OF AREA OF SELECTED CROPS AND THEIR SAMPLING ERROR AND PERCENTAGE INCREASE OR DECREASE OF ESTIMATED AREA OVER AGRICULTURAL CENSUS AREA, UNDER THE TIMELY REPORTING OF AGRICULTURAL STATISTICS SCHEME FOR FORMULATION OF ESTIMATES OF AREA AND PRODUCTION OF CROPS IN ANDHRA PRADESH DURING RABI 1973-74.

CROP: RASI

(Area in '00' Hectares)

Sl.No. District	Ratio estimate as per T.R.A.S Rabi, 1973-74.	Area as per Agricultural census, 1973-74.	Percentage variation of estimated area over actuals.	Percentage sampling error.
1. Srikakulam	60	48	(+) 25.00	9.01
2. Visakhapatnam	199	123	(+) 61.75	3.94
3. East Godavari	35	40	(-) 12.50	13.80
4. West Godavari	3	3	--	--
5. Krishna	--	1	--	30-70
6. Guntur	2	6	(-) 66.67	7.40
7. Ongole	302	292	(+) 3.42	4.90
8. Nellore	85	78	(+) 8.97	12.00
9. Kurnool	1	1	--	34.88
10. Anantapur	79	28	(+) 182.14	9.79
11. Cuddapah	120	113	(+) 6.19	9.11
12. Chittoor	67	59	(+) 13.55	5.08
Andhra Region	954	792	(+) 20.45	2.65
13. Hyderabad	1	1	--	61.90
14. Nizamabad	--	--	--	--
15. Medak	--	--	--	--
16. Mahabubnagar	13	9	(+) 44.44	1.38
17. Nalgonda	10	2	(+) 400.00	8.67
18. Warangal	--	--	--	--
19. Khammam	--	--	--	--
20. Karimnagar	--	--	--	--
21. Adilabad	--	--	--	--
Telangana Region	25	12	(+) 108.33	1.53
Andhra Pradesh	978	804	(+) 21.64	2.33

FACSIMILE OF TRAS CARDS & INSPECTION REPORTS

Scheme of Timely Reporting of Agricultural Statistics

District:
Taluk:

Circle/Firka
Village.

S-No.	C R O P	CURRENT	PREVIOUS
		Area as per Adangal/ Pahani during 73.74	Area as per Adangal/Pahani during 72.73.
		Irrigated unirrigated	Irrig- Unirriga- ated ted.
1.	Jowar (Ordinary)		
2.	Jowar (H.Y.V.)		
3.	Tobacco		

Date:

Signature of Karanam/Patwari

Kharif

Scheme of Timely Reporting of Agricultural Statistics.

Circle/Firka

Village:

[illegible]

1. Jowar (Ordinary)
2. Jowar (H.Y.V.)
3. Bajra (Ordinary)
Bajra (H.Y.V.)
3. Maize (Ordinary)
Maize (H.Y.V.)
4. Ragi
5. Groundnut
6. Castor
7. Cotton

Signature of Karanam/Patwar,

Re b1

District:

Pirka/Cir - led

Village :

C R O P

CURRENT

PREVIOUS

CONCRETE	PREVIOUS
Pahani during 1973-74	Pahani during 72-73.
Irrigated Unirrigated	Irrigated Unirrigated.

1. Maize (Ordinary)
2. Maize (H.Y.V.)
3. Ragi
4. Groundnut
5. Cotton
6. Bajra (Ordinary)
7. Bajra (H.Y.V.)

C A R D V

Due Date for Despatch: 15.3.1974.

Rabi

Bureau of Economics & Statistics
Government of Andhra Pradesh,
Hyderabad.

of

Scheme of Timely Reporting of Agricultural Statistics,

District:

Circle/Block:

Taluk

Village:

S.No.

C R O P

CURRENT

PREVIOUS

Area as per Adangal/
Pahani during 73-74 Area as per Adangal/
Pahani during 72-73.
Irrigated Unirrigated Irrigated Unirrigated.

Rice (Ordinary)

Rice (High Yielding Variety)

Date

Signature of Patwari/Karanam,

C A R D VI

Due Date for Despatch: 20.9.73

Bureau of Economics & Statistics,
Government of Andhra Pradesh
Hyderabad. 500004

District:

Circle/Block:

Taluk:

Village:

Sl.
No.

C R O P

Current
Area as per Adangal/
Pahani during 73-74

Previous
Area as per Adangal/
Pahani During 72-73.

Adsali Others Total

Adsali Others Total

Sugarcane

Date

Signature of Patwari/Karanam.

INSPECTION REPORT ON TIMELY REPORTING OF AGRICULTURAL STATISTICS IN ANDHRA PRADESH 1973-'74.

KHARIF-ABI
RABI-TABI

Particulars of village	Time consumed for inspection	Procedure adopted for selection of clusters
1. Name of District	1. Date of Arrival (specify the time)	1. Whether the crop enumeration committee related by Patwari/Karnam on the date of the visit. (specify Yes/No)
2. Name of Taluk		
3. Name of the village	2. Total No. of hours spent on the actual inspection in the survey and sub-division numbers selected.	2. Total number of survey and sub-division numbers.
4. Name of Karnam/Patwari.	3. Date and time of departure.	3. Random number column assigned
5. Total Geographical area of the village		4. Random number selected.
6. Whether the village is surveyed/unsurveyed/partially surveyed (Yes/No)		Cluster No. I
7. Total Cropped area		Cluster No. II
8. Net area sown.		
9. Area sown under different crops.		
CLOSURE		
As recorded is found by the Karnam the field in the Adanga worker after checking the page totals of Adanga/Pahani.		

suri		

SELECTED REPORT

DETAILED PARTICULARS OF ALL THE SURVEY NUMBERS AND SUB-DIVISION NUMBERS INCLUDED IN THE SELECTED CLUSTERS

Sl.No.	Cluster No.	Survey and subdivision number	Total area per Adangal/Pahani	Plants cultivated as per Pahani/Angal	Extent of area cultivated as observed on the field	Name of Crops	Area recorded in the Adangal/Pahani	Ordinary	High Yielding	Name of Crops	Irrigated	Ordinary	High Yielding	Area found on the field	G E N E R A L	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528

- (c) If this winter wheat crop have to be sacrificed and furnished.
(c) If variety-wise 1.3, High Yielding Variety and ordinary break
(c) If is not possible, total extent may be shown against the crop.

Signature, Name & Designation of
the Primary worker.
Date.

INSPECTION REPORT

PARTICULARS OF ALL THE SURVEY NUMBERS AND SUB-DIVISION NUMBERS GROWING HIGH YIELDING VARIETY:

Sl. No.	Name of the cultivation growing High Yielding Variety Crop	Survey/Sub-division Nos. growing High Yielding Variety Crop	Name of High Yielding Crop	Irrigated	Un-Irrigated	Total	Name of High Yielding Crop	Irrigated	Un-Irrigated	Total	General Remarks
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Signature & Designation of the worker
Dated:

SUPERVISORY OFFICER'S INSPECTION REPORT

A. IDENTIFICATION PARTICULARS:

1. Village :
2. Taluk :
3. District :

SUPERVISORY STAFF PARTICULARS:

1. Name and Designation of :
the Primary Worker
2. Name and Designation of :
Supervising Officer
3. Date of visit of Super- :
vising Officer.

Whether Area Enumeration Full // Partially/Not Completed.
is completed by Patwari

- a) by the date of visit of
Primary Worker
- b) by the date of visit of :
Supervising Officer

B. AREA UNDER PRINCIPAL CROPS IN THE VILLAGE:
(in respect of only three crops)

C R O P	As per Patwari	As per Primary Worker	As per Supervising Officer.
1. PADDY		Need not be filled in by	
2. JOWAR		the supervising Officer	
3. GROUNDNUT			

C. SELECTION OF CLUSTERS BY PRIMARY WORKERS:

1. Total No. of survey Nos. including :
Sub-division numbers.
2. Random Column No. allotted :
3. Basic Plots selected by :
Primary Worker
4. Whether the selection of clusters
is correct or not(Yes or No)

Contd..2

SUPERVISORY OFFICER'S INSPECTION REPORT ON HIGH YIELDING
VARIETY OF CROPS

A. IDENTIFICATION PARTICULARS:

1. Village :
2. Taluk :
3. District :

SUPERVISORY STAFF PARTICULARS:

1. Name and Designation of the :
Primary Worker
2. Name and Designation of the :
Supervising Officer.
3. Date of visit of Super- :
vising Officer.

Whether village improvement : Full/Partially/not maintained
register is upto date.

- a) by the date of visit of :
primary worker.
- b) by the date of visit of :
supervising Officer.

B. SELECTION OF CULTIVATORS GROWING HIGH YIELDING VARIETY
CROP:

1. Total No. of cultivators :
growing H.Y.V. Crops.
2. Random Column No. allotted :
3. Random Nos. selected :
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
4. Whether the selection of
cultivators is correct
or not (Yes or No)

suri.

5. PARTICULARS OF RATIONALISED SUPERVISION OF AREA UNDER HIGH YIELDING VARIETY CROPS

(only one cultivator has to be covered by the Supervising Officer)

Sl No.	Name of the Cultivator	Total extent of Survey Nos. Sub-division Nos. under High Yielding Variety as per village Development Officer's record.	Name of the Crop	Area recorded in the WDO's Record.		Area as per Observation
				Irrigated	Un-irrigated	
2		3		5	6	7
						8

Signature of the Supervising Officer
Designation.

**COVER PAGE PRINTED BY THE DIRECTOR OF PRINTING,
AT GOVT. SECRETARIAT PRESS, MINT COMPOUND,
HYDERABAD-A.P.
1975**